

· GENEVI. COMPANY 图 图 图 图 图

CHICAGO PORTLAND CEMENT CO.

513 STOCK EXCHANGE BUILDING, CHICAGO

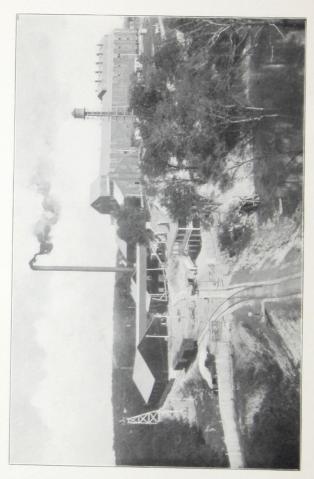
MANUFACTURERS OF

"CHICAGO AA"
PORTLAND
CEMENT

GARDEN CITY SAND CO.

- SOLE DISTRIBUTERS -

SECURITY BUILDING :: :: CHICAGO



WORKS OF THE CHICAGO PORTLAND CEMENT CO. AT OGLESBY, ILLINOIS (near La Salle).

From a photograph.

Built Built Park of Capital Capital Park IN FRANKLIN INSTITUTE

CHICAGO PORTLAND CEMENT CO.

Manufacture a strictly high-grade Portland Cement and one grade only.

HISTORY

The present enterprise is the outgrowth of a factory established at Hawthorne just outside of Chicago some years ago. At that plant there was produced from limestone and clay a Portland Cement of superior quality, and which was promptly recognized and accepted as such by the architects, engineers and contractors of Chicago and vicinity and used in many important constructions. In February, 1898, the Hawthorne plant was completely destroyed by fire, just as extensive improvements, largely increasing its capacity, were about completed. This misfortune caused the management of the Company to make extensive investigation of various deposits of cement materials and factory sites in this and other states, and resulted in the abandonment of the Hawthorne site and the formation of a new company with increased capital to operate at a new site where better conditions were secured

CAPACITY OF FACTORY

Four hundred thousand barrels annually is the capacity of the machinery now in our mill. The buildings and power are designed for an increase of fifty per cent.

to VERNALL STREET

MACHINERY EQUIPMENT

The machinery equipment is the best that can be obtained, including Gates' Rock Crushers, Krupp Ball and Tube Mills, Rotary Kilns from Vulcan Iron Works and Gates' Iron Works, Greene-Wheelock Cross Compound Condensing Engine of 1,000 horse power, B. & W. Water Tube Boilers, Electric Generators, Electric Motors, etc. Electric transmission of power is used largely for the machinery throughout the mill and in the quarry. Compressed air drives the quarry drills.

LOCATION OF FACTORY

Near La Salle, Illinois.

Factory address: for mail, Oglesby, Ill.; for express. Oglesby, Ill. (American Express Co.); for freight, La Salle, Ill.

The Company controls about two thousand acres of land through which flows the enchanting Vermilion River. Scenery is superb and exquisite along this river, the bluffs rising one hundred feet and more above the river bed and exposing the cement rock strikingly.

RAILROAD FACILITIES

Illinois Central Railroad by direct switch to factory.

Chicago, Burlington & Quincy Railroad by direct switch to factory.

Chicago, Rock Island & Pacific Railroad at La Salle.

I. I. & I. Railroad at Lostant.

C. & E. I. Railroad at Joliet.



C. & N.-W. Railroad at Spring Valley and Dixon.

A. T. & S. F. Railroad at Streator.

MAIN OFFICE

Chicago, Illinois, No. 513 Stock Exchange Building (108 La Salle Street). Telephone, Main No. 1248.

OFFICERS OF THE COMPANY

NORMAN D. FRASER, President. D. R. FRASER, Vice-President. RALPH GATES, Secretary and Treasurer.

CEMENT MATERIALS

Lime rock and shale clays are the raw materials used for making the "Chicago AA" Portland Cement. These lie very uniformly throughout the Company's properties. The lime rock is a horizontal deposit about twenty-two feet thick, and immediately below the rock lie the shale clays used, to a depth of about fourteen feet in two principal strata, separated by a thin horizontal seam of coal.

Analysis

			Limestone	Clay
Silica			6.06	53.12
Alumina) .				20.60
Iron Oxide 5 .			3.92	4.00
Lime			49.46	4.02
			10.	2.24
Sulphuric Anhyo	dride	е.	.10	
Ignition loss .			39.06	13.70

No more favorable materials for making a superior Portland Cement are to be found in America.

PROCESS

The "Dry Process" is used in a manner distinctly "American," and by which the American factories are now producing Portland Cement in enormous quantities and of a quality that exceeds the European product in all respects.

From the quarry crusher house the rock and clay are taken by an aerial tramway into the mill building and directly to two revolving dryers. The dried material is stored in great storage bins, from which, as required, it is automatically drawn and delivered by elevator, conveyors and automatic feeders to Ball Mills. By elevator and conveyors the partially pulverized material then goes to an immense storage and equalizing bin from which it is drawn by automatic machinery and conveyed to the Raw Tube Mills, which reduce it to very fine powder that flows continuously by elevator and conveyors into the large feed bins above the kilns.

Rotary kilns receive this dry powder from mechanical feeders and produce the cement clinker by means of heat maintained day and night at a temperature of about 3,000 degrees Fahrenheit, using pulverized coal blown in by air-pressure fans.

Automatic machinery cools the clinker which is mechanically stored by conveying machinery. From the clinker storage bins conveyors take the cold clinker to Ball Mills, fed automatically, and the partially pulverized clinker is then elevated to a storage bin over the Cement Tube Mills which finally pulverize it to the required fineness for Portland Cement.

The finished cement is automatically conveyed by machinery to and distributed in the stock house where the bins have a capacity of 40,000 barrels.

Sacking and barreling machinery in the stock house insure uniform weight and perfect package.

QUALITY

"The best that can be made" is our policy. "None shall be better" is our aim.

We believe that this has been fully attained and ask you to carefully read and consider the evidences of our record placed on the following pages of this catalogue.

CHEMICAL AND PHYSICAL TESTS

Our Laboratory is thoroughly equipped for making analysis and physical tests, and is one of the most complete Cement Mill laboratories in the country. Our Laboratory is in charge of a competent chemist who makes frequent chemical tests daily on the raw cement material.

The finished cement is also tested daily for fineness, soundness, setting and tensile strength.

No cement is allowed to leave our works unless it meets all the requirements of a first-class cement.

GUARANTEE

"Chicago AA" Portland Cement is guaranteed:

- I. Uniform in color.
- 2. Sound and reliable, passing all reasonable tests, such as the hot test and cold water test.
- 3. Strength satisfactory and increasing steadily with age.
 - 4. Fineness = 95% to pass 100-mesh United States standard sieve.

PACKAGES

We will ship "Chicago AA" Portland Cement in cloth sacks, paper sacks or wood barrels as the purchaser may desire, and guarantee full standard weight. T. Nicholson & Sons Co. General Contractors Suite 1310 Manhattan Building 315 Dearborn Street Chicago

Telephone Harrison 2466

Chicage August 2d, 1900.

The Garden City Sand Co.,

Security Blag. City.

Gentlemen:-

Replying to your inquiry regarding our experience with your ""Chicago AA"" Portland Cement.

After having the cement thoroughly tested by Messrs.

Robt. W. Hunt & Co. we used it in the construction of W. H. Merrit & Co's. Grain Elevator at South Chicago, with the best of results.

The bearing piers of elevators are generally built of Joliet Limestone, but in this elevator we substituted concrote made of ""A.A." Cement, upon examination we find the piers are standing well under a direct load of 400 Tons each.

We therefore can recommend your "A.A." Cement without hesitation.

Respectfully,

T. NICHOLSON & SONS CO.

PER Agrichalian

Sec & Tress.

Read T. Nicholson & Sons Co.'s letter.

Remember we guarantee our Cement, treated equally fair with any other highgrade Portland Cement, will produce equally satisfactory results.

The peer of any brand.

THE MERRITT ELEVATOR is one of the largest and most substantial in the entire Calumet region.

650 barrels Chicago AA Cement used.

Our product has no superior.

For more detailed information on how to use Portland Cement than given on pages 62 and 63 send to Chicago Portland Cement Co.

for "How to use Portland Cement."



H. H. KOHLSAAT & COMPANY'S BAKERY,

Chicago.

The most complete modern bakery in America. 700 barrels AA Chicago Portland

Cement used in this building.

"GILBERT H. SCRIBNER, JR.

GENERAL CONTRACTOR

ROOM 1007, NO. 135 ADAMS STREET

TELEMONE CURRAL 3004.

CHICAGO.

The Chicago Portland Cement Co.,

Chicago, Ill.

Gentlemen: -

During the year 1900, I used about 5000 Bbls. of your Chicago A. A. Portland Cement, and it has given perfect satisfaction in the work.

None of this Coment was rejected by the Engineers and every car was inspected and tested.

The work that this Cement was used on consisted of Abutments, Culberts, Arches and Facing of disintegrated stone; and in all of this work it finished with a good color, and by working gave a smooth surface.

This was entirely Railroad work.

Yours very truly,

GetScience

January 23, 1901.

ESTABLISHED 1870.

TELEPHONE 364 HERRIBON

J. L. FULTON & CO.

....Asphalt and Portland Cement Pavements....

Chicago & Eunber 8 to 2000

Chicago Portland Comme Co

108 La Salla S=

Sentteman

Whe have used thousands of.

Bolo of your Portland Comme, and
take great pleasure in recommoding
it for its uniformity of strongth
and its general reliability,

Jone Jouly
J. L. Fulton and Co



DRAINAGE CANAL BRIDGE, Western Ave. Boulevard. Bennezette Williams, Contracting Engineer.

5,000
barrels
AA
Chicago
Cement
used in
I. C. R. R. work by
Geo. Scribner Jr.
in 1900.



CULVERT, ILL. CENT. R. R., near Ft. Dodge, Iowa. Built by Geo. Scribner Jr.

More than 5,000 barrels of Chicago AA Cement used by J. L. Fulton & Co. in railroad work

in 1900.



ABUTMENT, ILL. CENT. R. R., near Iowa Falls, Iowa. Built by Geo. Scribner Jr.

WILLIAM D. PRIGE,

CONTRACTOR,

3427 N. 56TH AVENUE. · · CHICAGO.

July 14th, 1900

Garden City Sand Co.,

Security Bldg.,

Chicago.

Gentlemen:

I have recently used several car loads of Chicago A A

Cement in foundation work and the results as well as in tests, that

I have made, have been eminently satisfactory. It has all the ear

marks of a high grade Portland.

Sincerely yours,

Established INCL

HOPPER & MCNEIL CO.

BUILDING MATERIAL

308-310 JACKSON ST.

Tions City, Jown. July 7/00.

Garden City Sand Co.

Chicago, Ills.

Gentlemen:-

SOLE AGENTS

We have sold the Chicago A.A. Portland Cement for two seasons and have found it all that could be desired. The Sidewalk Contractors have used it largely and it has given good satisfaction, and compares favorably with other brands of American Portland Cement. We consider it equal to any on the market.

Yours

Hopper Dudenl Co



MEDILL SCHOOL,
Chicago.
Chicago AA in floors. By Sennott Construction Co.

Guaranteed for heavy foundations and all important work.



WISCONSIN CENTRAL R. R. FREIGHT HOUSE, Chicago.
2,500 barrels Chicago AA in foundations.

FRITZ FOLTZ,
ARCHITECT,
NO. 58 WABASH AVENUE.

CHICAGO. June 18th, 1897.

The Chicago Portland Cement Co.

Gentlemen: -

In answer to your request for a statement of my experience with your "A. A." Chicago Portland Cement" I am pleased to say that, after using your material in several large buildings for concrete work in foundations, I have no hesitation in pronouncing it equal to the best Portland Cement I have ever used, and that I shall continue to use it in future wherever good cement work is required.

Yours truly,

Fity Foels.

Trundad Asphall,
Macadam; Brick
Macadam; Brick
Dealiss en
Cedar Dist R.R. Ties
and Cedar Blicks,
Office,
Michanler of Commerce Blig

Mill and Dock, 1512 to 1563 South Paulina St.

R.F.Conuay, J.J.McCarthy; 2 President: Secretary:

R F Cenway Cempany, Street Pavements:

Chicago, February 5, 1901.

Chicago Portland Cement Co.,

513 Chicago Stock Exchange Bldg.,

City.

Gentlemen:

Replying to your inquiry regarding our experience with your Chicago A. A. Portland Cement, would state, that we have used several thousand barrels in foundation work with the best of results and take pleasure in recommending it to anyone wanting a high grade Portland cemen'

Respectfully,

R. F. Conway Company,

J. J. Treasurer.

Chicago
AA Cement
is uniform
in color,
absolutely
sound
and
reliable.



MORRISON HOTEL,
Chicago.
Chicago AA Cement used in Mosaic floors and in wainscoting 100 bathrooms.



Send for instructions how to use Portland Cement.

WELLS STREET,
Chicago.
Paved by R. F. Conway Company. Chicago AA Cement used:

PASSENGER STATIONS,
FREIGHT HOUSES,
ROUND HOUSES,
COAL CHUTES,
MACHINE SHOPS,
WAREHOUSES, EV.

GEO. B. SWIFT COMPANY,

GENERAL CONTRACTORS,

SECURITY BUILDING, Madison Street and Fifth Avenue,

GEO. B. SWIFT, President and Trassum.
CHAS. C. SCOULLAR, Vice-President.
GEO. F. JENKINS, Sug'l Construction.
HERBERT B. SWIFT, Secretary.

TELEPHONE, MAIN 5333.

CHICAGO, Feb. 13th, 1901.

The Chicago Portland Cement Co., Stock Exchange Building, City.

Gentlemen: -

In response to a verbal inquiry of your Mr. J.W.Woodruff, I would state that we used your Chicago "AA" Portland Cement in the construction of the foundations for the Illinois Central Passenger Station at Decatur, Illinois, and have used approximately three thousand barrels of the same brand in the machine shop and round house which we are now completing for the same company at Waterloo, Iowa. In both cases the results have been entirely satisfactory, and we are glad to recommend your Cement as a first-class article

GEO. B. SWIFT COMPANY.

Dict. H.B.S.

Geo. B. Swift Company used, in 1900, 3,000 barrels of Chicago AA Cement in railroad work. :: :: ::



AA Chicago
Portland Cement
used by the
Illinois
Central R.R.
in its most
important
work
including
stations, bridges,
culvert and
masonry.

ILLINOIS CENTRAL RAILROAD PASSENGER STATION, Decatur, III.

Francis T. Bacon, Architect. David Sloan, Chief Engineer. Geo. B. Swift Company, General Contractors.



JONATHAN CLARK & SONS CO. CONTRACTORS FOR BUILDINGS.

TELEPHONE HARRISON 1686 Suite 69, 2 and 4 Sherman Street

Chicago, Jan. 12, 1901.

Chicago Portland Cement Co.,

Stock Exchange, City.

Gentlemen: --

We have used your cement the past season and it has proved entirely satisfactory. We mention the following buildings where your cement has been placed.

Chicago Newspaper Union, 87-97 S.Jefferson St.

Chicago American Building.

Four buildings for the Chicago Telephone Co.

Manufacturers Building, Randolph & Canal Sts.

Yours truly,

JONATHAN CLARK & SONS CO Por J. C. Colark.

JOHN H. WAGNER ENGINEER AND ARCHITECT. Rooms 61 and 62, Portland Block.

Chicago, Portant Cament Co, Chicago, Chicago, Nare insiderable of norm Comentant func it in grown continued and function

John Hagaer



SPAN SIDEWALK, 16 feet by 130 feet, also Building Foundations made with Chicago AA Cement.

Jonathan Clark & Sons Co. Building Contractors.

Stamsen & Blome. Sidewalk Contractors.

Patronize
Home
Industry.



Chicago AA Cement used.

CHICAGO COTTAGE ORGAN CO.'S FACTORY, Chicago. Ralph & Sumner Sollitt, Builders. John H. Wagner, Architect. SAM. HALLS, Architect and Builder, Room 911, 218 LaSalle St., Tel. Harrison 82.

Chicago, August 4th, 1899.

Chicago Portland Cement Co.,

1205-108 LaSalle St., City.

Gentlemen: --

In giving you this testimonial, it gives me pleasure to have the opportunity to state some facts about your cement; having used it now for about two years in various ways, such as sidewalk work, foundation work, and curb street wall work.

I find it, for economy, color, durability and working, equal to any Foreign or Domestic cements that it has been my privilege to handle in the past eighteen years in Chicago.

Respectfully yours,

218 LA SALLE STREET

TELEPHONE MAIN 3295

G.R. Wilson B.A. Marshall,

Associated Architects.
CHICAGO. January 23rd, 1901.

Chicago Portland Cement Co.,

108 LaSalle St., City

Gentlemen:

With reference to your "A" "A" cement I will say, that we have used the same in the J. E. Murphy residence and in Gen. M. 7. Moloney's office building in Ottawa, Ill., and other buildings in our work and have found the same in all cases, satisfactory, and take pleasure in recommending it as one of the best of native cements.

Yours respectfully,

Dic. H. R. W.

Wayan Monley



CHICAGO RESIDENCES.

Built by Sam. Halls.

Sidewalks of AA Chicago Cement.

Send for instructions how to use Portland Cement.



RESIDENCE OF J. B. MURPHY, Chicago. AA Chicago Cement used. Wilson & Marshall, Architects. Sam. Halls, Builder.

FALKENAU CONSTRUCTION CO.

SUITE: 1116-1119 CHICAGO STOCK EXCHANGE BUILDING

HO LA SALLE STREET.

TELEPHONE MAIN 434

Chicago, Jan. 24th 1901.

Chicago Portland Cement Company,

Gentlemen,

With reference to the cement manufactured by your. Company, we are pleased to state that we do not hesitate to endorse it, especially for sidewalks and for foundation concrete.

While it sets rapidly it retains and increases its toughness with time. This makes it especially desirable for sidewalk work. Having used over 3000 barrels we have been enabled to judge of its uniform quality.

Further more we have used this cement at the Western Electric Building and found it very satisfactory.

Trusting that you may have the success you deserve, we remain,

Yours truly,

FALKENAU CONSTRUCTION CO.

V Fackenau Prest.

Architecu. Guite 1507. Gisher Budding 277 Drockom Gived. Chicage . Sechetect

January 10, 1901.

The Chicago Portland Cement Co.,

Chicago Stock Exchange Building,

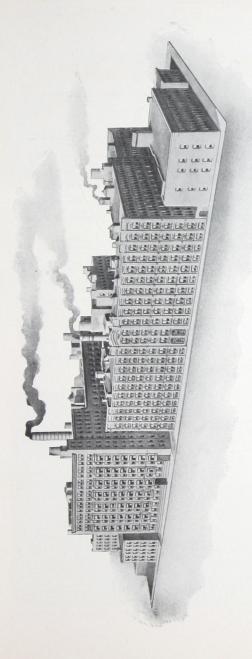
Chicago, Illinois.

Gentlemen;

Sumuel A. Treat

Having had an extended experience in the use of your product, both for masonry walls and for sidewalk construction, it enables me to judge of its qualities, and I can therefore say without hesitation that I have found no brand of goods more uniformly satisfactory than the "Chicago Portland Cement."

Yours truly,



FACTORY OF THE WESTERN ELECTRIC CO., Chicago.

S. A. Treat, Architect. Falkenau Construction Co., Contractors.

Building foundations, Over 3,000 barrels Chicago AA Cement used in this great factory. machinery foundations, floors, sidewalks. S. POTIS.

THE ILLINOIS

TELEPHONE CONSTRUCTION COMPANY ENGINEERING DEPARTMENT

754-758 ROOKERY BUILDING

CHICAGO, March 28th, 1900.

Garden City Sand Co., 1203 Security Building, Chicago, Illinois.

Gentlemen:-

Regarding your inquiry to-day concerning the result obtained of "C.A.A." Portland Cement used by us in the construction of underground conduits for our system. I am pleased to state that up to the present time we have obtained very satisfactory results with its use and cheerfully recommend it as first-class Cement for such purposes. We have used about two thousand barrels and have found it good and uniform.

Trusting this will subserve your purpose,

Yours truly,

Chief Engineer.

Asphalt. Cedar Block: Granite: Brick:

Yorth Sangamon St.

James A. Sackley.

Dealer in Cedar Posts and Paving Psloots

STREET PAVEMENTS

EXCAVATING

Office 301 Chamber of Commerce Bldg Titephone Main 3862

Chicago July 13th, 1900

The Garden City Send Co.,

1203 Security Bldg., City.

Gentlemen:

Having for the lest two years used several thousand barrels of your Chicago A A Portland Cement, it affords me pleasure to state that the Concrete made with this Cement has given me the very best of satisfaction and I would have no hesitancy in using it in any kind of Cement work, so far as quality is concerned.

Yours truly

James A Jackley

UNDERGROUND CONDUIT, Chicago, constructed entirely of concrete with Chicago AA Cement by The Illinois Telephone Construction Co.



Instructions how to use Portland Cement sent free on application.



WEST TWELFIH STREET, Chicago. Paved by Jas. A. Sackley in 1900, with Chicago AA Cement. . . . MEMORANDUM . . .

WILHELM GRIESSER

ARCHITECTS AND ENGINEERS.

... ENGINEERING Co. \$

Chicago, Jan. 3rd. 1898

907 TO 911 SCHILLER BLDG.

Specialty, Designing and Constructing Reswries, Malting Planis, Distilleries, Power Plants and Factories in general, Wilhelm Griesser's New Collar Construction, 30 per cent. saving of from or Steel.

Patentee and Builder of Grains Bryer America.

Wilhelm Griesser's Neep Tank and Machiely Valve.

Chicago Portland Cement Co., Chicago, Ill.

Gentlemen:
In regard to your inquiry, we wish to say that we have used about 1700 bbls., of your "AA" Chicago Portland Cement in the construction of the new Stable for the Gottfried Brewing Co., and that same has given in strength as well as in color the best satisfaction. We have used this cement for the arches which varied in lengths up to 18'0", and also for the floor, and can recommend your cement for all concrete constructions.

Yours respectfully, Wm. Criesser, Eng. Co., per Buch Griessey

ALBERT GRAFF & CO.,

Telephone Main 4469

177 La Salle Street.

PORTLAND CEMENT AND ASPHALT PAVING.

HIGH-GRADE CEMENT WALKS A SPECIALTY.

Chicago, Ill, July 6th, 1900

Garden City Sand Co.,

Deer Sirs:

We have used a considerable amount of "Chicago A A "Portland Cement and find it satisfactory in every detail. It shows a stronger test then most Cements used end is elso very beautiful in color.

Graff, bo

No work too important.

No test too severe.

SCHWARZSCHILD & SULZBERGER BREWING CO.'S CHICAGO SUPPLY MARKET.

Ralph & Sumner Sollitt, Contractors.

Chicago AA Cement used.





GOTTFRIED BREWING CO.'S STABLE, Chicago.

Stamsen & Blome, Concrete Contractors.

Wilhelm Griesser Engineering Co., Architects and Engineers.

1,700 barrels Chicago AA Cement used in concrete arch construction.

JOHN L. HOERBER BREWERY.

Wilhelm Griesser Engineering Co., Architects and Engineers.

Stamsen & Blome, Concrete Contractors.

Chicago AA Cement used.



STONE, BRICK, A. EINFELDT, MASONS' MATERIAL, OFFICE and YARD One Block West of Depot

Oak Bark. Ill. Jan. 19, 1901.

Chicago Portland Cement Co ..

Chicago Stock Exchange Bldg. Chicago, Ill.

The Chicago A.A.Portland Cement has given me entire satisfaction during the past five years in which I have sold it at my yard. I have not only sold it but have had sidewalks build in front of my property. Am pleased to say that no manufacturer, dealer or contractor can show me better walks, and by this I mean in relation to color, strength and in every other particular that goes to make first class cement walks. In fact my satisfaction is such that I have no desire to change so long as the cement shall retain its present high standard.

> Yours very truly, a. Einfeldt

The Cown of Cicero.

Office of Town Engineer

Barry B. Potwin,

Bustin, Cook Co., Ill.

Austin, Ill., January 17th, 1898.

Chicago Portland Cement Co.,

During the past year I have used considerable Chicago Portland Cement in the construction of combined curb and gutter and cement sidewalks, and am well satisfied with the results obtained. I prefer American Portland cements to the imported product and consider your cement will bear favorable comparison with any American Portland cements I have used. I have been especially pleased with its uniformity in quality and results show a uniform color.

Yours truly, Annual others.
Town Engineer.

Then of liceno.

See what Mr. Einfeldt says after selling "AA" five years.



Chapel.

FOREST HOME CEMETERY.



Driveway through Cemetery.

> Chicago AA Cement used exclusively in constructing the Chapel and in curb and gutters.

KANKAKEE ARTIFICIAL STONE CO.,

BRICK PAVING ...

Cement Walks, Curb and Gutter,
Floors, Cisterns, Etc.

KANKAKEE, ILLINOIS, NOV. 23, 1900.

Chicago Portland Cement Co.,

Chicago, Illinois.

Dear Sirs :-

Yours of the 14th inst is at hand. Regarding the AA Portland cement I can say that it fills all the requirements of a first class cement. We have used it in four countries this season and every where it is giving the most satisfactory results. We have abundant faith in its durability and can cheerfully recommend it for any kind of work where good first class cement is needed.

Yours very truly,

John De vere Ley

Miles of curb and gutter and sidewalk testify to the good qualities of Chicago AA both for color and strength.

J. W. KELLY.

MANUFACTURE OF
ASPIRALT, PATENT STONE WALKS, ETC.

DIXON THUNOIS 11/7/00

Chicago Portland Cement Co.,

Chicago Stock Exchange,

Chicago, Ill.

Gentlemen ..

Take pleasure in saying we used Chgo. A.A.Portland cement during seasons of 97-99-1900 in walks, curbs, steps and driveways and it has given satisfaction. Walks laid in 97 still show up a perfect surface under heavy traffic.

Yours truly,

J. W. Kully

STREET IN KANKAKEE, ILL. Sidewalks, Curb and Gutters of Chicago AA Cement.





KANKAKEE PUBLIC LIBRARY.

> John Devere, Secretary Kankakee Artificial Stone Co. Says:

"Stones weighing over five tons were repeatedly dropped on this walk and never damaged it a particle. Walk only four inches in thickness."

STEPS AND WALK in Savanna, Ill. Built by one of the

pioneers in the concrete business, J. W. Kelly, Dixon, Ill.

Chicago AA Cement used.



J. W. MITCHELL GENERAL PAVING CONTRACTOR

CEMENT SIDEWALKS, CELLAR FLOORS, CURBS, GUTTERS, ETC.

A SPECIALTY THE

Madison Wis July 6th, 1900.

The Garden City Sand Co.

Chicago, Ill.

Gentlemen :-

In reply to your request as to what I know of Chicago "A A" Portland Cement, I have used 400 bbls. so far this Season and find the Chicago "A A" equal to any Portland Cement, I know of for any work in my line. I have used it in sidewalks, curbings, curb and gutters, cellars and have put up a 15" wall 8'6" high 22' x 36' and have never had anything give better satisfaction, and do not hesitate in recommending the Chicago "A A" Portland Cement to any one wanting first class work.

Yours truly,

J. W. Mithell.

404 Security Building, Chicago, Ill. January 12th 1898.

Chicago Portland Cement Co.,

1205 Stock Exchange, Chicago.

Gentlemen: -

Replying to yours of recent date, will say that the work that was done with your "AA" cement in building the foundations of the bridge, last season, over the Des Plaines river in the Town of Main, Cook County, Ill., was satisfactory in every way; and is considered by the Cook County Board of Commissioners the best piece of work under their supervision.

I have found the cement to be of uniform grade and quality in this and other work under my supervision, and has shown in test the highest degree of fineness and quality shown in any Portland Cement.

Yours respectfully,

N. T. Emerson

REPORT OF TESTS ON CHICAGO AA PORTLAND CEMENT

COLLEGE OF ENGINEERING.

IRA O. BAKER,
PROPESSON OF CIVIL ENGINEERING.

UNIVERSITY OF ILLINOIS.

Champaign, Ill., March 6, 1901.

Chicago Portland Cement Co.,

Stock Exchange Building, Chicago, Illinois.

Gentlemen:

Below please find the results of my tests of the sample of Chicago AA cement received from you.

WEIGHT. The weight loose is 87 lbs. per cu. ft., or 108 lbs. per bushel. The weight is of no special value.

SPECIFIC GRAVITY. The specific gravity is 3.15. No special importance attaches to this test.

ACTIVITY. The time from mixing to initial set is 2 hours, 5 minutes, and to hard set 4 hours, 25 minutes. For a Portland cement this is very satisfactory.

SOUNDERSS. The cold pat test and also the hot water test shows the cement to be perfectly sound.

FINENESS. The amount passing a No. 50 sieve is 99.6%; No. 100, 95.4%; No. 200, 79.8%. Fineness measures the sand carrying capacity of a cement, i.e., its economic value. This cement is unusually high in this very important quality.

TENSILE STRENGTH. The tensile strength varies greatly with the details of the method of making the tests, particularly with the amount of water used, the pressure employed in filling the molds, and the character of the sand. Therefore, I have tested your cement by three methods of filling the molds, and with three kinds of mortar, as shown in the accompanying table. The results are in pounds per square inch. The table needs little or no explanation.

COLLEGE OF ENGINEERING.

IRA O. BAKER.

PROFESSOR OF CIVIL ENGINEERING.*

UNIVERSITY OF ILLINOIS.

Champaign, Ill.,

The first line shows the strength when the mortar was pressed into the molds with the thumbs. The second line gives the results for briquettes put into the molds with the German standard hammer apparatus. The third line shows the strength when the briquette is molded with a pressure of 4000 pounds. In this country the usual method of molding is by hand.

The quality of the sand greatly influences the strength of the mortar, the variation from this cause alone sometimes being 200 to 300 per cent. The sands used in the table are the recognized standards, although building sands will often give higher strength, since the standard sands have grains of only one size and therefore have a large per cent of voids. The standard sands are used because they are definite in quality.

The table proves that the cement is among the strongest.

All the above tests show that the cement is among the very best.

Respectfully Submitted,

Soal Baker
M. Am. Soc. C. R.

Report of Tests by IRA O. BAKER, C. E., Professor of Civil Engineering, University of Illinois, author of "Treatise on Masonry Construction," Member of American Society of Civil Engineers, and Member of Western Society of Engineers, etc.

TENSILE STRENGTH OF CHICAGO AA PORTLAND CEMENT POUNDS PER SOUARE INCH

Method	of	Meat (Meat Cement w of water at 70° F	mt w 70° F	Meat Cement with 14% water at 70° F	4 %	1 Pc Germ	art Ce	mentando	and Surd Surd	I Part Cement and 3 Parts German Standard Sand with		1 Pa Stan	art C	Crus	Part Cement and 3 Parts Standard Crushed Quartz	3 Pa Quart	rts 2
5							62 %	62% of water at 70° F	ater	at 70°	L		with	1629	of we	with 62% of water at 70°F.	t 70° I	L.
Moulding 24 hr. 7da 30da. 3mo 6mo. 1yr 24 hr. 7da 30da 3mo 6mo 1yr 24 hr 7da 30da 3mo. 6mo. 1yr.	24 hr.	700	30da.	3mo	6 mo.	lyr.	24 hr.	700	30da.	3 mo	6 то	1 yr	24 hr	7da	30 da	3mo.	6 то.	1 yr.
Hand	370	370 843	970				62	29 233 246	246				24	24 206 233	233			
Böhme' Hammer	538	904	1081				68	68 313 336	336				69	69 327 561	561			
Olsen Press -4000 Lbs	334		630 892				27	27 132 156	156				45	180 238	238			

CORRECT Sall Baker

(See explanatory letter on preceding pages)

Test on Chicago AA at Minneapolis COPY OF THE RECORD OF CEMENT TESTS.

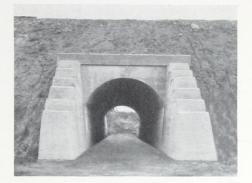
CITY ENGINEER'S DEPARTMENT, Minneapolis,

	Time of	Tension STEAIN TO 89, INCH	SQ. INCH		Crusting	_	Per Cent.	30	ovise 50 50	9A198	
Date	Brand Setting in	house days days days days days days days	days Jays	days		sitton	Water	Temp. Wate Pr. ct. I gess assa assa	Pr. ct. J ness nesh	Pr. ct. I ness. mesin	REMARKS
	29 HH 24Kr.	509 606 624913 900				Max.	19	89	100	596	May, 19 68 100 965 From Cor, 27096
-		633, 649 700 886 907									In set. 3.0.
		703 662,702 890 911									Hord, 5:35
		765 667 720 935 972	_								0/0 Wat Gat. 27
		879 727 761 967 986									Thuse 700 m. 70.
		694662,701898435	10								Steaming 3 Hors of.
		170 205200 220 757									(at a year
		173208203237 757				1+3.	18				Coment Ukod by
		180 213 204250 768									Wilson Bress.
		185 213 220 257 775	-								
		195 226223 269 276									
		181 213,210 247 265									

NOTE-This test commenced December 27th, 1900

CONCRETE CULVERT on Chicago & Eastern Illinois R. R.

W. S. Dawley, Chief Engineer.





BRIDGE over Desplaines River. Desplaines, Ill. H. L. Emerson, Engineer.

CONCRETE CULVERT on Chicago & Eastern Illinois R. R.

W. S. Dawley, Chief Engineer.



Chicago AA Cement used in all of the above constructions.

HENRY ZOLPER
PORTLAND CEMENT WALKS
RELIABLE WORK ONLY
MENDOTA, ILL.

Mendota, Ill., July 14, 1900.

Chicago Portland Cement Co.,

Stock Exchange Bldg.,

Chicago, Ills.

Gents:-

In regard to the merits of the A.A. Chicago Portland Cement, I take great pleasure in recommending it to anyone wanting a high grade Sidewalk Cement. During the seasons of 1897, 1899 and this season so far, I have used more than one thousand barrels of A.A. in laying sidewalks, etc., and none of it has failed to give the best of results. The season of 1898 I did not use the A.A. on account of your plant burning. The color is all that could be desired. On account of the fineness of the grinding it will carry more sand than any Cement that I have ever used.

Yours truly,

Henry Zolfier.

RED F. NAPPORD 217 MERCAPTILE BLE.

R. N. WAPPOND HES. 245 WALNUT ST. TELEPHONE 2252

R. S. SAFFORD & SON CEMENT CONTRACTORS.

Chicago Portland Cement Co.,
Chicago

Gentlemen

At the close of our season, me

Mish to espress to you our catisfaction

with the Chicago AA Cement

WE have used period thousand

sacks, in our work during the summer,

and that means that me are well

satisfied with it.

Respectfully yours



He has used "AA" three years without a failure.





FOUNTAIN in Park at Elgin, Ill.

Chicago AA Cement used in all this work.

SPAN SIDEWALK, in Aurora, Ill. By R. S. Safford & Son.



Page 35

A C. WARREN, SUPT.

TELEPHONE MAIN 3113

HOEFFER & Co.





COMBINED GRANITE-CONCRETE CURB AND GUTTER

CHICAGO, February 18, 1901

Chicago Portland Cement Company,

Stock Exchange Building,

Chicago.

Gentlemen:

We have used your Chicago AA Portland Cement in various kinds of concrete work, both in Chicago and other cities and it has given us perfect satisfaction. It has stood all tests imposed, is excellent in strength, even in color and produces a work equal in quality and appearance to the best that can be made.

Yours very truly,

HOEFFER & CO.

THE

VULCAN WESTERN CO.

STREATOR, ILL.

TELEGRAPHIC ADDI

OFFICE.

STREATOR, ILL.,

July 19th, 1900.-

Chicago Portland Cement Co .-Chicago, Ill .-

Gentlemen:-

We take much pleasure in stating that your Chicago A. A. Portland Cement, of which we have used 10 car loads in building our plant here, has given us entire satisfaction, and we feel justified to recommend your brand to builders without hesitation.

Very truly yours,

THE YULCAN WESTERN COMPANY.

Caernos

CONCRETE CONDUIT in Bloomington, Ill. Laid by Hoeffer & Co. of Chicago.



Equipment of Chicago AA Factory is perfect in every particular.



BRIDGE ABUTMENTS AND CENTER PIER Calumet River, Pennsylvania Railroad.

CONCRETE CONDUIT in Bloomington, Ill.

Laid by
Hoeffer & Co.
of Chicago.



Chicago AA Cement used in all of the above work:

Illinois Central Railroad Company! Office of Engineer of Britges and Buildings

Chicago, November 26, 1900.

Chicago Portland Cement Co.,

Stock Exchange Bldg.,

Chicago, Ill.

Gentlemen:

Answering yours of the 24th instant, the following is the result of a series of tests on your "AA" Portland Cement. The twelve months' tests were not finished until a few days ago, the last one being November 20th:--

		" Neat	1-1	1-2	1-3
1	day	320	219	210	102
7		391	407	395	306
28		469	446	421	359
3	months	551	525	478	428
6		593	553	552	452
12		650	665	605	503

Very truly yours.

Engineer Bridges & Buildings.

Dixon, Ill., July 11th, 1900.

The Garden City Sand Co.,

1203 Security Building ,

Chicago, Ill.

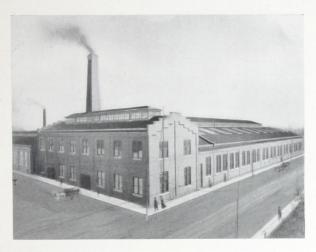
Gentlemen:-

In reply to your inquiry concerning the result obtained of "C.A.A." Portland Cement used by me in the construction of buildings I am pleased to say that the results have been very satisfactory, and I can cheerfully recommend it to the building public.

Very truly yours,

W.J. M. alpines

Note increase in tensile strength in above test.



ILLINOIS CENTRAL CAR SHOPS AND ROUNDHOUSE, at Waterloo, Iowa.

H. W. Parkhurst, Engineer of Construction. Geo. B. Swift Company, Contractors.

Instruction on the use of Portland Cement sent free on application.



Upwards of 20,000 barrels of Chicago AA Cement used by the Illinois Central R. R. in 1900.

DAVID LAWTON,

-DEALER IN-

Grain, Flour and Seeds,

BUILDING MATERIAL AND AGRICULTURAL IMPLEMENTS.

Racine, Wis. July 11, 1900.

Messrs. Garden City Sand Co.

Chicago, Ill.

Gentlemen:-

Your esteemed favor of the 5th inst.,
was recd, requesting the results of our experience
with Chicago A A Portland Cement - It will not take
long to give it. We have only one opinion
and that is that it is entirely satisfactory - not
a complaint - not one, but all say it works nicely
under the trowel, sets in nice time, and becomes
as hard as stone, and for sidewalks we have never
seen its equal. I think we have some of the most
beautiful and perfect walks in existence- all from
this AA and hope the good quality can be kept
up.

Respectfully.

Dang Lawfore

"Not a complaint. Some of the most beautiful and perfect walks in existence," says David Lawton.



STREET IN RACINE, WIS.

Walks laid with Chicago AA Cement. See what David Lawton says.



CHICAGO
AA CEMENT
SIDEWALKS,
Elm Street and
Lake Shore
Drive,
Chicago.

Chicago AA Cement is unsurpassed for laying sidewalks.



(HICAGO.

December 20, 1897.

Chicago Portland Cement Co., 1205 Stock Exchange Bldg., City.

Gentlemen: -

Answering your favor of December 13th in relation to your "AA" cement, would say that we have used the same on several occasions and have just used a large amount in making the foundations for the machine shop addition to our present plant. The foundations for this building, including piers and all other work, have been constructed entirely out of concrete, in proportions of one of cement, four of torpedo sand and six of broken stone, and are in every way perfectly satisfactory; in fact, we believe that we might have used twelve to one, instead of ten with perfectly safe results.

In erecting the building to which the present building is an addition, we used English portland cement in proportions of one, three and five, and the concrete in the new building seems, to all appearances, to be superior to that made with the imported brand.

. We are expecting to erect another building to the plant at no very distant date, and shall use your dement in this work. In fact, we have come to the conclusion that on account of the material which it will carry that we can afford to use it in foundations and all such work as against the common hydraulic cements. 'We are,

Very truly yours,

GATES MALES. President.

A building material of the greatest merit.

Harder and stronger than natural stone.

W. S. MACHARG, CIVIL ENGINEER, THE ROOKERY.

LATE ENGINEER WATER SUPPLY ME SEWERAGE.
WORLD'S COLUMBIAN EXPOSITION.
CONSULTING ENGINEER ON INTERCEPTING
SEWERS, CITY OF CHICAGO.

CHICAGO. July 13, 1900.

Garden City Sand Company,

Security Building, City.

Gentlemen:

The sample of "Chicago AA" cement submitted to me by you for test has been broken with the following results:

Briquettes, one square inch section, moulded by hand, neat and of mortar of parts of cement and sand by weight noted, kept twonty-four hours in the air and the remaining time in water, broken at the stated ages, show the tensile breaking weights in pounds per square inch noted. Fineness is the per cent passing an 100-mesh sieve.

Book No.	Fine	Parts	% Water	: 7 days	: 28 days	: 3 mos.
616	95.0%	neat	:	: 466 : 415 : Av441	574 586 Av 580	
616C :	95.0%	lc:3s	10.0	: 171 : 176 : <u>171</u> : AV <u>173</u>	: 257 : 271 : 266 : Av 265	
616E	95.0%	lc:5s	7.0	: 101 : 79 : 96	: 157 : 140 : 168	

Initial set lh 35m; Final set 2h 45m. Sound in cold pat.

The gain from seven days to twenty-eight days of 31% in
the neat, 53% in lc:3s, and of 68% in the lc:5s, is noticeable and
taken in connection with the moderate but ample strength at a week
is indicative of a trustworthy cement.

Very truly yours MacHarg

Note Mr. MacHarg's remarks regarding this Cement, at the foot of this letter, as to its sand carrying capacity.

All Work Guaranteed First-class.

D. P. FAUS.

Cement & Walks,

CURBINGS AND FLOORS.

Cistern, Cemetery, and All Kinds of Fine Cement Work.

Waterloo, Jowa, July 6, 1900

The Garden City Sand Co.,

Chicago, Ills.

Gentlemen.

Replying to your inquiry of the 5th, would say I have used your Chicago A A Cement in sidewalks and curbing on some of the principle Streets of our City and the results have been very satisfactory in every instance and I believe it to be equal to any of the best brands of American or imported Portland cements and as long as you keep the quality of your cement up to the high standard you now have it I will use it exclusively.

Very truly yours,

D. P. Frans

Chicago AA not only stands all technical tests, but stands the practical tests in construction work.

Joint Track Elevation 18th Street to Ashland Avenue Chicago

REPORT OF CEMENT TESTS

Car No		Ini	tial		
Brand of Cer	nent_loh	icogo	AH		
Sample Num	ber 95	6			
Date of San	npling A	4c 31-	- 1905		
Fineness—P	ercentage p	passing No. 1	100 Sieve	93.8	
Activity { In	itial Set	0	Hours	50	Minutes
Activity Fi	nal Set	1	Hours	45	Minutes
Soundness .	Air Pat_	ok			
Soundness.	Water Pa	at 07(
	Boiling T	est O14			

Tensile Strength-Pounds per Sq. Inch.

	NEAT (CEMENT			MOR	TAR	
% Water				% Water	Cement	Sa	ind
Used by Weight	7 Days	28 Days	90 Days	Used by Weight	7 Days	28 Days	90 Days
18	6.20	815		10	140	300	
	530	815			145	235	
	490	870			135	285	
	640				145	245	
	570	800			153	280	
	530	824			144	269	

NOTE:—All Briquettes remain 24 hours in air, and the remainder of the time in water.

The Boiling Pats remain 12 hours in air before boiling.

For further instructions about the use of Portland Cement than given on pages 62 and 63, write Chicago Portland Cement Co. for book "How to use Portland Cement." Sent free on application.

DEALERS OF LUMBER___

> AND ALL OTHER BUILDING MATERIAL

C. L. BARTLETT.

HAVE LATELY CONSTRUCTED

BARTLETT & KLING, CONTRACTORS

TELEPHONE NO 308 OFFICE: 19 NORTH FIFTH ST FOR ALL KINDS OF CONSTRUCTION WORK.

Heckuk, Dowa, 7/7

a a . Portland

The Garden City Sand Co.,

Security Bldg. Chicago.

Gentlemen: -

We have yours of above date.

We have concluded that your Chic "A A" Cement is all right for our work and expect to order minimum car very soon. Should have ordered before this except there is a little uncertainty about the sale of the Bonds for the building and we are holding off for a few days on that account.

Bartlettolling.

MINIC TIME ROMENTY WHITE IMPOTONE Hannibal Mo Nov. 16, 1900.

Chicago Portland Cement Co.

Gentlemen; In response to yours of the 14th inst. will say that we have handled your "A.A. Chicago" Portland all this year, and although we have widely scattered it in the region here and west of us, we have not received complaint as to a single barrel of it. It has proved uniformly good, giving full satisfaction in every instance. We will add that there is no branch of our business that we are more careful about, than in the selection of Portland Cement.

Very truly,

Hannibal Pine Co.

PETER O'HAIR.

CEMENT PAVER,

412 H AVE.

Prompt Attention Given to all kinds of Cement Work.

Sterling, M. Dieme Let 4 1900

Chicago Portland Coment &

Manufacturers of "A Schicago"

Portland Cement.

Gant termen - 15th 15 years Efferience of

home used many branchs of Portland Cement

and have formed your "A tolicago" Portland

to be fully as good as the best Important

Cements. I have used 1100 banels this

censorie in the temotruction of Cement Sidewalls.

Curbing, Coping, Cellor bottoms Te, and

have found it to be uniform in quality

and Color. I can cheef fully secondary

if for any kind of Concrete surely

Ley Reals atfully found

Peter O Hair

Note what Peter O'Hair, "the father of cement walks in the west," says of Chicago AA Cement: "With twenty-five years experience I have used many brands of Portland and have found Chicago AA to be equal to the best Imported Portland Cement."



OFFICE 136 HENNEPIN ST

La Salle, III. July 17 - 1900

Chicago Portland Cement Co

Gento

Regarding your ingury concerning our opinion of the a a lehicago Portland bement, we are pleased to state that it has given the bist of satisfaction. The most of the a a has been used in laying sidewalky-so far we have had not complaint whatever The color is very discussed It is ground very fine which makes it a very economical cement to use because it will carry a large amount of sand

Yours Respectively W. H. Hunter Co.

T. W. Ballew,

July 9" 1900.

Mound City, Mo.

Dear Sir:-

We are in receipt of your favor of the 7" inst which we have forwarded to the Garden City Sand Co. of Chicago, who will be pleased to quote you prices on A. A. Cement in car load lots delivered at Mound City. We do not handle the cement to the trade in car load lots and are only prepared to make shipments of small lots locally. Chicago A. A. is not the Atlas Cement but is equally as good for any purpose and we think superior in most places.

Trusting that they will be able to make you prices that will be satisfactory, we remain

Very truly yours, C. S. Rex & Son.

(T.H.H.)

Beo BRey

Mngr.

Allen & Campbell,

Serman Portland Cement Sidewalks, Curbing, Mitching Posts, Etc.

behicago Portland bement les bhicago Ill,

Sentlemen, If it is not too late to grant a request, from you people some time since, I will do so as soon as the snow leaves the ground, you asked me to have a photograph taken of some of the most fromment work we have done, Bad weather came on before things were cleared away, We have put in over 12500 squar feel of walk and basement since the middle of October, with a, a, and think enough cannot be said of your product,

Very Respectfully yours,

Allen & bampbell,

Allen & Campbell have made a specialty of using IMPORTED Portland Cement in their work. Last fall we got them to try Chicago AA. They say "enough cannot be said of your product."

H. HUNTER, Henry, III.
E. F. HUNTER, Chillicothe, III. W. F. STEVENS, La Salle, III.

. . OFFICE OF . . . Hunter, Stevens & Co.,

Lumber, Lime, Coal, Cement, Sash, Doors, Blinds, Moldings. Stc.

Vards

Hand Course Col. ou numerous E City, + Can say that every Where it has been used Ich oatifaction Clu trods to a side walk Cement, x WE find " equal to see the drumula sunds rou a firt Close, high grade fideloach Central Its authorn fruesays oand carrying Cohacily ofor + Strength Should Commendath to areful they we ceruy where Jente Herrano

See what our neighbors say regarding Chicago AA. Chicago AA is superior for exterior finish of residence.

The following tables are taken from the Sixth Annual Report of the Department of Public Works, City of Peoria, Illinois, by A. D. Thompson, City Engineer.

The following tables give a summary of the tests upon the best American and imported Portland cements conducted during the past season and can be taken as a comparison of the merits of these cements:

Portland Cements-American

	No.		Finenes	S		Neat		1 Cement to 3 Sand
Brand	Lots Tested	No. 50 Sieve	No. 74 Sieve	No. 100 Sieve	24 Hours	7 Days	30 Days	7 Days
AlphaAtlasSaylorEmpireChicago AA	16 15 15 16 40	98.3 99.7 100.0 99.4 99.7	94.7 94.1 99.2 96.4 99.2	\$0.0 88.5 94.9 90.1 97.1	258 417 364 329 337	787 776 567 570 549	890 636 718 664 700	193 166 243 182 253
Average		99.4	96.7	92.1	341	650	721	209

Portland Cements-Imported

	No.		Fineness	3		Neat		1 Cemen to 3 Sand
Brand	Lots Tested	No 50 Sieve	No. 74 Sieve	No. 100 Sieve	24 Hours	7 Days	30 Days	7 Days
Dyckerhoff Lagerdorfer Josson Stettin Gristow Germania Alsen Schifferdicker	16 19 10 17 49 64 11 87	99.6 99.2 99.8 98.9 99.8 99.0 99.0	94.9 95.7 98.0 92.0 97.6 92.1 93.2 96.1	86.8 90.3 95.4 86.0 89.7 87.4 89.6 91.8	207 375 282 278 363 272 277	404 495 412 451 521 463 446 496	517 635 758 528 649 642 590 613	148 114 170 236 213 239 175 184
Average		99.4	95.0	89.6	283	461	616	185

Notice where Chicago AA stands with a mixture of 1 part cement, 3 parts of sand.

CITY OF CHICAGO:

CITY OF CHICAGO:

LABORATORY OF CEMENT TESTS...STREET DEPARTMENT.

Fineness: Passing No. 50 sieve 7.9. 3. 40 No. 100 sieve 9. 4. 5.. 40 No. 200 sieve 7.9.1.... Soundness:

Barchauge Chucagod & min min on month of the control of the contro	18 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	-	Setting	-			Stre	Strength in Pounds per Square Inch	unds per Sc	quare Inch	
Harehough Checagodd "" " " " " " " " " " " " " " " " " "	Harehaust 6 18 25 + Carteures 6	1	Itial Final	Mont	Di Di	Tensile	Average	Cement	Sand	Age Tens	He Avera
8 5 × Collected (2 2 1 7) 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	18 Est Calterral	agost of in	8 X X X X X X X X X X X X X X X X X X X	"	doug	727		1	3 17	Haus 41	8
Sandle J 22421-22445		2	1		6	732	-			1 42	2
Sandle J 22421-22445						414	-			43	0
Sandle J 22421 - 22591-22645				-		737	-			70	0 113
Samble N 22,421-22,440+22591-22645						148	732	-	2	82	170
Samble N 22,421-22,440+22591-22645				:	8days	800	-			54	1 s
Sandle J 22421-22440 + 22591-22645	6				0	101				48	200
Sandle J 22421-22440+22591-22645						101				50	
Sande J 22421-22440+22591-22645	1 1/2					288	799		-	49	2 5
	Sandile IV	421-22	0440	122	89	8-1	10	45	1		

TEST OF "CHICAGO AA" CEMENT

HIGAGO HAN ULEDOS SAMPLE SUBMITTED BY GARDEN CITY SAND GO. GHICAGO, N.L. TEST BY - Eaton Shepardam John Eaton Shepardam City Engineer, Minor

- TEST- OF- TENSILE-STRENGTH-

						$\overline{}$		-		
NO.	OF	STRENGTH IN	TESTS	FRACTURE		No.	A6E or	TEHSILE STRENSTH	TESTS	LOCATION OF FRACTURE
1	1 day	128		at Clips		L	1 day	38		at Clips
2	14	133		at Center		2	EF.	37		je .
3	11	128	. 47	at Clips		3	11	36	37	- II
4	11	170	147	at Center		4	- fr	37	131	fr
5	tr.	156		at Clips	Trated on	5	11	35		17
6		165		at Center	Fairbanke	6	No.	37		14
7	7 days	472	6	17	Shot machine	7	7 days	175		at Center
8	11	529		igit.	Bull of 3 low.	8	11	141		at Clips
9	11	485			500 to per min.	9	10	164	100	11
10	41	505	491	16		10	12	183	169	18
11	69	505		11		17	11	197		11
12		450		pt pt		12	11	157	U I	79
13	28 days	552				13	28 days	2.38		at Center
14	11	585				14	Fe .	240		at Clips
15	11	640		11		15		252	237	
16	11	586	605	Ph .		16	Se	247	LUI	at Center
17	17	623		N		17	10	210		
18		635				18		235		at Clips
19	60 days		-	10		19	60 days	292		11
20		673	1	12		20		288		at Center
21	11	542				21	11	270	265	11
22		645	639			22	- 11	266	LYDO	18
23		6.52				23	11	225		
24		618				24	to to	250		11

City wales used amount 248 h 258 of way gold of day cayon! My guelles compacted by hand preserve.

140.	OF	STREMSTH	TESTS BUTTER	FRACTURE
	1 day	38		at Clips
2	10	37		pe pe
3	19	36	37	- II
4	fr	37	131	rr .
5	14	35		17
6	Se	37		19
7	7 days	175	1	at Center
8	84	141		at Clips
9	10	164	100	11
10	14	183	169	17
17	11	197		11
12		157		19
13	28 days	2.38		at Center
14	14	240		at Clips
15	**	252	237	11
16	Se .	247	LUI	at Center
17	16	210		11
18	211	235	-	at Clips
19	60 days	292		11
20	11	288		at Center
21	11	270	265	H
22	- 11	266	100	18
23	f1	225		10
24	81	250	1	11

amount water from 10 th 122 % of wright morter day Brightles compacted by light rapping 50 times with 1/2 to won wallet

- FINENESS-

TEST	PASSING.	U.S. STAND	SIEVE
No	*100	#74	# 50
1	963%	988%	999+%
2	97.5%	99.0%	99.9+%
3	968%	98.9%	999+%
AVER-	96.9%	98.9%	99.94%

- SETITING-

TEST	TIME OF SET				
No.	INITIAL	PERMANENT			
-1	75 MINUTES	180 MINUTES			
2	.80 "	180 "			
-3	55 "	165 "			
4	70 "	190 "			
5	80 "	210 "			
AVER-	72 "	185 "			

TEST FOR SOUNDNESS:

should be part of need to ment one half much thick count by damp cloth in til set should up writing or toponium or continction at end of well charge, no charle not enach appearing on easile.

COPY

CITY OF CHICAGO

LABORATORY OF INSPECTOR OF CEMENTS

AVERAGE RESULTS OF AMERICAN PORTLAND CEMENTS: NEAT, 3 PARTS SAND & 3 PARTS LIMESTONE SCREENINGS

MADE IN CITY LABORATORY CHICAGO AVE PUMPING STATION

NEATTO		1 A A A A A A A A A A A A A A A A A A A	TIME	E READ	0	H	11				TENSILE AND CRUSHING STRENGTH PER IN INCH	E AND	CRUSH	ING S	TRENG	TH PER	INCH			
2 MITTAL, HARD True Ordo MINA	BRAND	ELVA LEW CE LIMENS	O.M.	NUTES		SET	TING			NEAT			1 10	3 PA	RTS S	ON	1 10 3 6	PARTS	LIMESTO	L
10 10 10 10 10 10 10 10		2.00	INITIAL		Ť	IP DE	NIN		40	1	2000		1	-					2	1
10 10 10 10 10 10 10 10	MARKET ALLEN		L	<u>-</u>	-	-			-	1	E DATS		ZA HR	DAYS		90 DAYS	24 HR.	7 DAYS	28 DAYS	
10 10 10 10 10 10 10 10	MATLAND	88,80	7.8		72	4				3088	3863	670	282	220	337	376	5.8	192	244	
99,32 90 263 75 2 11 Trivinina 206 74 74 74 74 74 74 74 7	ALPHA	92,28	_	232	19	10		TENSILE		8 6 6 8	887	999	000	247	347	388	67	252	386	
99.72 75 75 75 75 75 75 75	CHICAGO A A	98.32	_	263	75	_	=	TENSILE		9 9 1	720	747	200	279	383	4007	0 00	1633	2848	
89,37 65 - 1 65 - 1 7 6 6 6 6 6 7 7 6 6	SAVLOR	00 70	-	0 4.	-		⊢			8.8	700	9000	672	200	3327	3561	759	2474	2991	
10 10 10 10 10 10 10 10		2010	0	280	0	7	4			4884	6644	7064	277	1552	N N N N N	3081	444	23.	280	
93,43 81 269 72 3 71 TRINING 700 853 8694 7256 826 021 840 82,29 60 256 74 3 6 TRINING 700 853 8694 7256 826 021 840 825 826	EMPIRE	89,37		165	75			CRUSHING		8888	0 6 8 8	200	3.6	0	27.6	352	2.8	222	320	
92.29 60 - 2.56 74 72 - 17 6 74 75 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	VULCANITE	93,43	. 18	269	. 72	m				729	. 864	999	72	2 - 8	319	2506	0 10	1927	235.5	
	ATLAS	02.20		25.8	70			TENSILE	274	219	780	7234	828	238	2135	2758	040	1667	2500	
TILE STAR 01.32 66 - 251 - 74 5 ' 0 TAUSHING 1700 5150 8055 611 735	STEEL		100		1		1	TENSILE		8203	4000	7216	542	1764	2466	2741	3 4 2	1741	2425	
STAR 91,32 68 251 74 5 . 8 TENSILE 203 646 705 92 218	1		1,6	151	-	0	-	CRUSHING		0181	2656		382	1631	8 2 7 8		000	19.8	.275	
	BONNEVILLE STAR			\rightarrow	- 74	10	-	CRUSHING		8180	8068		10 m	2 - 8	4 - 6		0 0 0	257	2081	
																	20	867.8	2411	

I HEREBY CERTIFY THAT THE ABOVE TEST IS CORRECT.

CHIEF CEMENT TESTER

THE CHICAGO & ALTON RAILWAY COMPANY. RNGINERING DEPARTMENT.

H. F. BALDWIN,

CHICAGO. February 19, 1901.

Chief Engineer.

Chicago Portland Cement Co.,

Stock Exchange Bldg., C i t y.

Gentlemen:-

The following are the results of tests made in our labaratory of a sample of Chicago AA Portland cement received from your company early in January:

FINENESS. 94.3% passing No. 100 sieve.

SETTING. Initial 2 hrs. 30 min; final 6 hrs. 45 min.

STEAM TEST. O.K.

The following are the averages in each case of ten briquettes in tensile test:

Neat, 761 740 28 days. 28 days. 3 to 1, 270 318 430

Yours truly,

Look at these sand tests: "Chicago AA" Cement invariably shows great and steady increase in strength in the sand tests.

CHICAGO, ROCK ISLAND & PACIFIC RAILWAY CO.

OFFICE OF CHIEF ENGINEER

W E. DAUCHY, Chief Engineer.

Chicago, Ill March 5, 1901.

Garden City Sand Co.,

513 Stock Exchange,

CITY.

Gentlemen: -

Below please find test of Chicago Portland Cement

Co'8. "AA".

	7 days	28 days 60	days Fineness.
Neat	429 303 414 487 327 531	641 554 721 656 525 513	#11 passed 60 mesh .985% 80 " "
Average	415	601	
Three (3) sand to one (1) cement.	137 118 163 144 125 136	265 270 234 313 264	
Average	137	269	

Yours truly,

WE Danchy Chief Engineer.

11-

Note the remarkable increase in strength. "Chicago AA" can always be depended upon.

RAILROAD WORK

Illinois Central R. R.
Chicago & Eastern Illinois R. R.
Chicago & Alton R. R.
Pennsylvania Co.
Belt Line.
Wisconsin Central R. R.
Chicago Union Traction Co.

BRIDGES

Chicago Drainage Canal.
Desplaines, Illinois.
Feehanville, Illinois.
Peru, Illinois (Culvert).
Pennsylvania R. R., Calumet River.
Waterloo, Iowa (Culvert).

MOSAIC WORK

First Church of Christ Scientist.

Morrison Hotel.

Boston Oyster House.

Northwestern Café.

W. H. Heegard & Co.'s Cigar Store.

SCHOOLS OF CHICAGO

Medill.
Calhoun.
Montefiore.

BREWERIES

John L. Hoeber Brewing Co.
Seipp's Brewing Co.
Standard Brewery.
Gottfried Brewing Co.
Best Brewing Co.
Horner's Brewery, Peru, Illinois.

MALT HOUSES

Watkins, Fritz & Vincents.

TESSELATED FLOORS

Art Institute Building, Chicago, Illinois.

GOVERNMENT BUILDINGS (Post-offices)

Elgin, Illinois. Monmouth, Illinois. Streator, Illinois.

PACKING COMPANIES

Swift & Company, Chicago, St. Paul, and St. Joseph, Mo.

International Packing and Provision Co., Sioux City.

Schwarzschild & Sulzberger Beef Co., Chicago. Armour & Co., Chicago.

Nelson Morris & Co., (National Box Co.)

LARGE BUYERS OF CEMENT

Standard Oil Co., Whiting, Ind.
McCormick Harvester Co., Chicago.
C. W. Hull & Co., Omaha, Neb.
Koch & Meyer, Quincy, Ill.
Abel Lime & Cement Co., Davenport, Iowa.
Granitoid Paving Co., Davenport, Iowa.

SIDEWALKS, ETC. IN

ILLINOIS:

Chicago. Aurora.

Evanston. Elmhurst.

Highland Park. Batavia.

Kankakee. Dixon.

Freeport. Ottawa.

Mendota. Quincy.

La Salle. Elgin.

SIDEWALKS, ETC. IN

ILLINOIS:

Rockford. Peoria. De Kalb. Lostant. Hinsdale. Buda. Berwyn. Oak Park. Streator. Havana. Austin. Mt. Carroll. Wenona. Bloomington. Rutland. Stirling. Hinckley. Springfield. Moline. Walnut. Rock Falls. Fairbury. Sycamore. Chebanse. Washington Heights. Litchfield. Wyoming.

IOWA:

Waterloo. Creston. Dennison. Sioux City. Spencer. Clinton. Forest City. Davenport. Woodward. Perry. Santiago. Webster City. Ames. Allerton. Remsen. Keokuk Cedar Falls. Des Moines.

SIDEWALKS, ETC. IN

MISSISSIPPI:

Aberdeen.

Amory.

Jackson.

LOUISIANA:

New Orleans.

WISCONSIN:

Racine.

Madison.

Milwaukee.

Baraboo.

Monroe.

Prairie Du Sac.

Richland Center.

MINNESOTA:

Minneapolis.

Lyle.

St. Paul.

MISSOURI:

Kansas City.

St. Louis.

Hannibal.

CURB AND GUTTERS

Chicago.

Kankakee.

Austin.

Mt. Carrol.

Kenosha.

Madison.

Baraboo.

INSTRUCTIONS FOR USING PORTLAND CEMENT

Character of Materials to be Used with Cement

Sand should be clean, coarse and sharp. A loamy sand should be avoided; it will give bad results and retard the set. Gravel or crushed stone should be clean, and vary from one-quarter to two inches in size. Care must be taken if work is being done during winter months. The material must be kept from freezing, and during such times warm instead of cold water is preferable for mixing concrete.

Mixing

Mix cement and sand well together until it shows a uniform color, then add the required quantity of stone, and mix well together by shoveling over three or four times. Add only sufficient water to bind the materials together, so that when handled by a shovel it will not crumble or fall off. Too much water weakens concrete. Where large quantities of concrete are required, concrete mixers are preferable to hand mixing, both for better and quicker mixing and a saving in cost.

Proportions for Concrete Work

Varying proportions of sand and stone can be mixed with one part of cement and give good results, but for all ordinary purposes, such as foundations of sidewalks, mill or machinery foundations, house foundations, retaining walls, cisterns and reservoirs, etc., one part of cement, two parts of sand, and five parts of broken stone, or one part of cement, three parts of sand, and seven parts of broken stone, will give excellent results. If absolutely watertight work is required, an excess of water is found to be preferable, as in setting the voids will be more easily filled. Never mix large quantities, but only as much as can be put in place within fifteen or twenty minutes after mixing.

Laying Work

See that the mixture is rammed well into place with a tamping-iron, or heavy wooden rammer; lay quickly, so that the layers adhere to each other, and in cold weather, to avoid freezing, use one pound of salt to fifteen or eighteen gallons of water. In hot weather, after concrete has set (say twelve hours), wet frequently with water, especially on sidewalk work.

Directions for Laying Pavements

Depth of excavation depends greatly on soil; if walks are bounded on each side by soil, fifteen to eighteen inches should be excavated and filled up to within four inches of level with good ashes, clinker gravel or stone, sprinkled and rammed well; this is necessary to prevent frost getting under pavement. Stakes and strips (2" x 4") should be set on the outside to keep the walk straight; then fill to within one-half inch of top of strips with concrete mixed proportionately as stated in "Proportions for Concrete Work;" ram well, as previously directed; before the sub-surface is hard set, fill the remaining one-half inch with top surface, which is generally composed of one part of cement to one or two of good sand or coarsely ground marble dust or limestone, or trap rock screened to from one-sixteenth to one-eighth inch in size. Obtain an even surface by working the top dressing backward and forward with the edge of a level board, which should rest on the strips on each side of the walk; when it is worked sufficiently to fill all pores, trowel even surface. Too much troweling is objectionable. Blocks should be laid in four or five foot squares; lay every other block, returning to lay intervening blocks when the first ones are sufficiently set to allow of strips being removed. Waterproof paper should be laid between joints to prevent the sections adhering to each other. Never use pure cement for dusting, but use equal parts of cement and sand. Dusting should be avoided and only done in cases where it is found too much water has been added to the mixture. Protect the surface against hot rays of sun and against currents of air.

Walks laid according to the above rule will require seven to eight pounds of cement to the square foot. Curbs and gutters should be made in one that they may bind together, and should be made in lengths of four or five feet each; the facing or curbing should be finished with a coating of one part of cement to one of sand, carefully worked and troweled as soon as the boards can be removed to admit of same; the edges should be beveled off.

Cellar Floors

Cellar floors should be from three to four inches in thickness, concrete to vary in strength in proportion to the use the cellar is to be put to. For ordinary purposes a concrete mixture of one part cement, five parts sand, and ten parts stone will be sufficient. Top surface to be made same as sidewalks. One barrel of cement will lay about seventy-five feet of good cellar flooring.

Mortar

For masonry and brickwork use one part of cement to five or six parts of clean, sharp sand, adding about one-half part of fresh-slacked lime; to give the mortar a plastic nature, add more lime if necessary. One barrel of Portland Cement should be sufficient to make enough mortar to lay up two thousand (2,000) bricks with quarter-inch joints.

For further instructions for using Portland Cement write to Chicago Portland Cement Company for book, "How to Use Portland Cement," sent free on application.



